



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,684	03/18/2004	Janne La. Aaltonen	P3137US00	6181
36671 7590 04/14/2010 DITTHAVONG MORI & STEINER, P.C. 918 Prince Street Alexandria, VA 22314				
EXAMINER SHU, HO T				
ART UNIT 2457		PAPER NUMBER		
NOTIFICATION DATE 04/14/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@dcpatent.com

### Office Action Summary

**Application No.**

10/803,684

**Applicant(s)**

AALTONEN ET AL.

**Examiner**

HO SHIU

**Art Unit**

2457

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 23-58, 60-80, and 82-123 are pending in this application.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/10/2010 has been entered.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 23, 34-35, 45, 51-52, 58, 69-70, 80, 91-92, 102, and 113-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy et al. (US Pub # 2002/0142780 A1, hereinafter Airy) in view of Chu et al. (US Pub # 2002/0049853, hereinafter Chu).**

5. With respect to claims 23, 58, 80, and 102, Airy discloses an apparatus system, method, computer program product comprising a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform the following: send an upload request to a recipient, ([0010], lines 1-5, a subscriber unit is transmitting a request to send data blocks to the base transceiver station) the upload request comprising a request to upload content from the apparatus to the recipient, the content comprising a plurality of data packets ([0010], lines 1-5, a subscriber unit is transmitting a request to send data blocks to the base transceiver station); receive from the recipient in response to the upload request, an upload schedule relating to at least one of a time and a manner of uploading the content in an upload session ([0010], lines 11-15, the base transceiver station generates a schedule that includes time slots and frequency blocks in which the requested data blocks are to be transmitted from the subscriber unit to the base transceiver station); upload the content to the recipient in accordance with the upload schedule ([0010], lines 15-17, the subscriber unit transmits the data blocks the subscriber earlier requested to send, according to the schedule). Although Airy discloses devices such as a subscriber units and base transceiver unit in which

discloses that memory and a processor is utilized, Airy does not explicitly disclose at least one processor; and at least one memory including computer program code, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform; after an interruption occurs in the upload session while uploading one of the plurality of data packets, receive an instruction to resume the upload session, the instruction including an identifier of the content and a pointer to the one interrupted packet; and reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded.

In the same field of endeavor, Chu discloses at least one processor ([0089]); and at least one memory including computer program code ([0089]), the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform ([0089]); after an interruption occurs in the upload session while uploading one of the plurality of data packets, receive an instruction to resume the upload session, the instruction including an identifier of the content and a pointer to the one interrupted packet ([0097], [0100]); and reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded ([0098], [0100]). Airy and Chu are analogous art because they both disclose transferring data between devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy with at least one processor; and at least one memory including computer program code, the

Art Unit: 2457

at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform; after an interruption occurs in the upload session while uploading one of the plurality of data packets, receive an instruction to resume the upload session, the instruction including an identifier of the content and a pointer to the one interrupted packet; and reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded as disclosed in Chu in order to resume operation of the file transfer. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by being able to resume transferring the file without starting from the beginning.

6. With respect to claim 45, Airy discloses an apparatus system comprising a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform the following: receive and upload request from a sender, wherein the upload request comprises a request to upload content from the sender to the apparatus, the content comprising a plurality of data packets ([0010], lines 1-5, a subscriber unit is transmitting a request to send data blocks to the base transceiver station); determine, in response to the request, an upload schedule relating to at least one of a time and a manner of the sender uploading the content to the apparatus in an upload session; ([0010], lines 10-15, the base transceiver station generates a schedule that includes time slots and frequency blocks in which the requested data blocks are to be transmitted from the subscriber unit to the bas transceiver

station); receive an upload descriptor of the content and the content from the sender in accordance with the upload schedule, the upload descriptor including a size of the content ([0010], lines 15-17, the subscriber unit transmits the data blocks the subscriber earlier requested to sent, according to the schedule. Although Airy discloses devices such as a subscriber units and base transceiver unit in which discloses that memory and a processor is utilized, Airy does not explicitly disclose at least one processor; and at least one memory including computer program code, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform; track received data packets and assemble a list of completely uploaded data packets during the upload session; and after an interruption occurs in the upload session while uploading one of the plurality of data packets, reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded.

In the same field of endeavor, Chu discloses at least one processor ([0089]); and at least one memory including computer program code ([0089]), the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform ([0089]); track received data packets and assemble a list of completely uploaded data packets during the upload session ([0066], [0100]); and after an interruption occurs in the upload session while uploading one of the plurality of data packets, reestablish the upload session to upload to the recipient each of the remaining packets that is

not completely uploaded ([0098], [0100]). Airy and Chu are analogous art because they both disclose transferring data between devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy with at least one processor; and at least one memory including computer program code, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform; after an interruption occurs in the upload session while uploading one of the plurality of data packets, receive an instruction to resume the upload session, the instruction including an identifier of the content and a pointer to the one interrupted packet; and reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded as disclosed in Chu in order to resume operation of the file transfer. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by being able to resume transferring the file without starting from the beginning.

7. With respect to claims 34, 51, 69, 91 and 113, Airy discloses wherein the upload schedule includes at least one instruction based upon the content and at least one network over which the content is uploaded, and wherein providing for uploading the content comprises providing for uploading the content based upon the content and the at least one network ([0010], lines 8-11, 19-22, the base user queue size estimate influences future schedules generated by the base transceiver station which means that the schedule is depended upon the size of



Art Unit: 2457

the file (content)).

8. With respect to claims 35, 52, 70, 92 and 114, Airy discloses wherein the upload schedule includes at least one instruction based upon at least one upload time of the content determined based upon the content and at least one network over which the content is uploaded, and wherein providing for uploading the content comprises providing for uploading the content based upon the at least one upload time ([0010], lines 8-11, 19-22, the base user queue size estimate influences future schedules generated by the base transceiver station which means that the schedule is depended upon the size of the file (content)).

9. With respect to claims 55, 74, 96, and 118, it is rejected for the same reasons as above. Airy discloses wherein the apparatus is further caused to push the upload schedule to the sender thereby automatically uploading the content in accordance with the upload schedule, the upload descriptor includes information of a preferred time, place and technology for uploading the content ([0010]). In addition, Chu discloses the upload session is interrupted by user intervention ([0097]).

10. **Claims 24, 29-30, 46, 64-65, 80, 86-87, 103, and 108-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu in view of Brown et al. (US PUB 2002/0194205 A1, hereinafter Brown).**

Art Unit: 2457

11. With respect to claims 24, 38 and 103, Airy and Chu do not disclose delete the content from the memory after uploading the content to the recipient.

In the same field of endeavor, Brown discloses delete the content from the memory after uploading the content to the recipient ([0094], lines 2-5, sending instructions to the server to move, rename, or delete a single file or directory). Airy, Chu and Brown are analogous art because they disclose transferring data between servers, machines, clients, servers, etc.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy and Chu with deleting the content from the memory after uploading the content to the recipient as taught in Brown in order to have full authority/control over content that was meant to be accessed for a short period amount of time, for saving storage purposes, or other general purposes. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more versatile system by allowing client/admin etc. to be able to make changes to information on the server/database etc.

12. With respect to claims 29, 48, 64, 86 and 108, Airy and Chu do not clearly disclose process the content, and upload the processed content.

In the same field of endeavor, Brown discloses process the content, and upload the processed content ([0099], lines 1-5, [0100], lines 4-7, being able to implement partial downloads and uploads to minimize the amount of data that is transferred over the wire when a file is updated). Airy, Chu and Brown are

Art Unit: 2457

analogous art because they deal with transferring data between servers, machines, clients, servers, etc.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy and Chu with process the content, and upload the processed content as disclosed in Brown in order to be able to transfer part of a document that has changed. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more versatile system by being able to implement partial downloads/uploads and not the whole entire document to minimize the amount of data that is transferred.

13. With respect to claims 30, 65, 87 and 109, the claims are rejected as the same reasons as claims 29, 48, 64, 86 and 108 above. In addition, Brown discloses wherein processing the content comprises at least one of transcoding or truncating at least a portion of the content ([0099], lines 1-5, [0100], lines 4-7, being able to implement partial downloads and uploads to minimize the amount of data that is transferred over the wire when a file is updated).

14. **Claims 25-28, 46-47, 60-63, 82-85, and 104-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu in view of McDonnell et al. (US Patent # 7,257,386, hereinafter McDonnell).**

15. With respect to claims 25, 46, 60, 82 and 104, Airy and Chu do not clearly disclose receive information reflecting a current state of at least one of the recipient or the apparatus before uploading the content, wherein the apparatus uploads the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of at least one of the recipient or the apparatus.

In the same field of endeavor, McDonnell discloses providing for receive information reflecting a current state of at least one of the recipient or the apparatus before uploading the content, wherein the apparatus uploads the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of at least one of the recipient or the apparatus (column 7, lines 45-50, col. 6, lines 41-54, the message/data/file is going to transmit with a low or high bandwidth connection based on the response from the recipient regarding if they wish to receive the message from a low bandwidth or high bandwidth connection. The data can be split into a minor portion send via the slower connection, PLMN, while the major portion is transmitted when the mobile device is within range of the WBSR base station). Airy, Chu and McDonnell are analogous art because they disclose transferring data between systems/clients/servers etc.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy and Chu with providing for receiving information reflecting a current state of at least one of the recipient or the apparatus before uploading the content, wherein providing for

uploading the content comprises providing for uploading the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of at least one of the recipient or the apparatus as disclosed in McDonnell in order to be able to be able to upload the data to be split into a first minor portion which is transmitted before the major portion is transmitted when the mobile device is in range. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more versatile system by being able to upload/download data when the unit is in range to connect with a connection that allows a better transfer rate.

16. With respect to claims 26, 61, 83, and 105, the claims are rejected as the same reasons as claims 25, 46, 60, 82 and 104 above. In addition, McDonnell discloses wherein providing for receiving information reflecting a current state comprises providing for receiving information including at least one of a connectivity, location, actual movement or predicted movement of at least one of the recipient or the apparatus (column 7, lines 45-50, column 8, lines 40-42, the message/data/file is going to transmit with a low or high bandwidth connection based on the response from the recipient regarding if they wish to receive the message from a low bandwidth or high bandwidth connection. The data can be split into a minor portion send via the slower connection, PLMN, while the major portion is transmitted when the mobile device is within range of the WBSR base station).

17. With respect to claims 27, 47, 62, 84 and 106, Airy and Chu do not clearly disclose wherein the upload schedule includes at least one instruction dependent upon a state of at least one network over which the content is uploaded, and wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform: providing for receiving information reflecting a current state of the at least one network before uploading the content, wherein providing for uploading the content comprises providing for uploading the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of the at least one network.

In the same field of endeavor, McDonnell discloses wherein the upload schedule includes at least one instruction dependent upon a state of at least one network over which the content is uploaded, and wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform: providing for receiving information reflecting a current state of the at least one network before uploading the content, wherein providing for uploading the content comprises providing for uploading the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of the at least one network (column 7, lines 39-41, lines 45-50, the message/data/file is going to transmit with a low or high bandwidth connection based on the response from the recipient regarding if they wish to receive the message from a low bandwidth or high bandwidth connection. The data can be split into a minor portion send via the slower

connection, PLMN, while the major portion is transmitted when the mobile device is within range of the WBSR base station). Airy and McDonnell are analogous art because they disclose transferring data between systems/clients/servers etc.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy with wherein the upload schedule includes at least one instruction dependent upon a state of at least one network over which the content is uploaded, and wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform: providing for receiving information reflecting a current state of the at least one network before uploading the content, wherein providing for uploading the content comprises providing for uploading the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of the at least one network as taught in McDonnell in order to be able to be able to upload the data to be split into a first minor portion which is transmitted before the major portion is transmitted when the mobile device is in range. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more versatile system by being able to upload/download data when the unit is in range to connect with a connection that allows a better transfer rate.

18. With respect to claims 28, 63, 85 and 107, the claims are rejected as the same reasons as claims 27, 47, 62, 84 and 106 above. In addition, McDonnell discloses wherein the information includes at least one of traffic on the at least

Art Unit: 2457

one network or bandwidth available to at least one of the recipient or the apparatus on the at least one network (column 7, lines 39-41, lines 45-50, column 6, lines 33-40, the message/data/file is going to transmit with a low or high bandwidth connection based on the response from the recipient regarding if they wish to receive the message from a low bandwidth or high bandwidth connection. The data can be split into a minor portion send via the slower connection, PLMN, while the major portion is transmitted when the mobile device is within range of the WBSR base station).

**19. Claims 33, 37, 39-42, 50, 53-54, 56, 68, 72-73, 75-77, 84-95, 97-99, 112, 116-117, and 120-121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and in view of Kohno (US Pub 2003/0120802 A1, hereinafter Kohno).**

20. With respect to claims 33, 50, 68, 90 and 112, Airy and Chu does not disclose wherein the content includes a plurality of pieces, wherein the upload schedule includes at least one instruction comprising an ordering of the plurality of pieces of the content, and wherein at least a portion of the content is uploaded based upon the ordering of the plurality of pieces of the content.

However, in the same field of endeavor, Kohno discloses wherein the content includes a plurality of pieces, wherein the upload schedule includes at least one instruction comprising an ordering of the plurality of pieces of the content, and wherein at least a portion of the content is uploaded based upon the



ordering of the plurality of pieces of the content ([0114], lines 4-8, [0115], lines 1-7, [0111], lines 9-12, The ARW processing unit of the data transmission terminal identifies packets to be retransmitted based on the option parameter, timestamp, and sequence numbers. The ACK-RTCP packet includes fields of heater, format, packet type, ..., and received-sequence numbers). Airy, Chu and Kohno are analogous art because they disclose sending/receiving/transferring data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy and Chu with wherein the content includes a plurality of pieces, wherein the upload schedule includes at least one instruction comprising an ordering of the plurality of pieces of the content, and wherein at least a portion of the content is uploaded based upon the ordering of the plurality of pieces of the content as disclosed in Kohno in order for the transferring of data to be in sync with one another. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another so that streaming of video, audio, or files of the same nature can be provided to the designated location without having to complexly re-configure the assortment of data received.

21. With respect to claims 37, 53, 72, 94 and 116, Airy and Chu does not disclose wherein the upload request is sent with an upload descriptor that enables at least one of the apparatus or the recipient to determine if an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an

interruption occurs in uploading the plurality of data packets, enables the recipient to recover the content.

However, in the same field of endeavor, Kohno discloses wherein the upload request is sent with an upload descriptor that enables at least one of the apparatus or the recipient to determine if an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an interruption occurs in uploading the plurality of data packets, enables the recipient to recover the content ([0069], lines 5-14, [0074], lines 1-3, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission), the recipient is configured to recover the content based upon the upload descriptor such that the recipient receives the plurality of data packets ([0074], lines 1-15, [0075], determine that a retransmission request be issued, the receiver terminal create a retransmission request). Airy, Chu and Kohno are analogous art because they disclose sending/receiving/transferring data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy and Chu with wherein the upload request is sent with an upload descriptor that enables at least one of the apparatus or the recipient to determine if an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an interruption occurs in uploading the plurality of data packets, enables the

recipient to recover the content as disclosed in Kohno in order for the designated recipient to acknowledge that files are missing during transfer due to known/unknown errors/interruptions. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another so that proper re-transfer of the missing files only will be transmitted again to save time, bandwidth, memory, cost, etc.

22. With respect to claims 54, 73, 95, and 117, it is rejected for the same reasons as claims 53, 72, 94 and 116 above. In addition, Kohno discloses determining at least one remaining data packet to be uploaded to the apparatus to thereby complete uploading of the plurality of data packets of the content; instructing the sender to send the at least one remaining data packet; and receiving the at least one remaining data packet such that the apparatus receives the plurality of data packets ([0074], lines 1-15, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission).

23. With respect to claim 39, Airy and Chu does not disclose wherein uploading the content comprises providing for uploading the plurality of data packets and at least one information packet regarding at least one group of at least one data packet.

However, in the same field of endeavor, Kohno discloses wherein uploading the content comprises providing for uploading the plurality of data

packets and at least one information packet regarding at least one group of at least one data packet ([0069], lines 1-14, flag indicating the end of the frame is set). Airy, Chu and Kohno are analogous art because they disclose sending/receiving/transferring data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy and Chu with wherein uploading the content comprises providing for uploading the plurality of data packets and at least one information packet regarding at least one group of at least one data packet as disclosed in Kohno in order for the designated recipient to acknowledge that files are missing during transfer due to known/unknown errors/interruptions. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another so that proper re-transfer of the missing files only will be transmitted again to save time, bandwidth, memory, cost, etc.

24. With respect to claims 40, 56, 75, 97 and 119, the claims are rejected as the same reasons as claims 39, 55, 74, 96 and 118 above. In addition, Kohno discloses wherein the apparatus is further caused to upload the at least one packet that enables the recipient to monitor the uploaded data packets to determine, based upon at least one information packet, in an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an interruption occurs in uploading the plurality of data packets, to thereby enable the recipient to recover

the content such that the recipient receives the plurality of data packets ([0074], lines 1-15, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission).

25. With respect to claims 41, 57, 76, 98 and 120, Airy and Chu does not clearly disclose wherein the apparatus is further caused to determine if an interruption occurs in uploading the content such that the recipient only receives a portion of the content, and if an interruption occurs in uploading the content, executable the apparatus is further caused to: receive a length of the received portion of the content to thereafter upload a remaining portion of the content to the recipient.

However, in the same field of endeavor, Kohno discloses wherein the apparatus is further caused to determine if an interruption occurs in uploading the content such that the recipient only receives a portion of the content, and if an interruption occurs in uploading the content, executable the apparatus is further caused to: receive a length of the received portion of the content to thereafter upload a remaining portion of the content to the recipient ([0074], lines 1-15, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission). Airy, Chu and Kohno are analogous art because they disclose sending/receiving/transferring data.

Therefore, it would have been obvious to a person of ordinary skill in the

art at the time the invention was made to incorporate the teachings of Airy and Chu with wherein providing for uploading the content enables at least one of the apparatus or the to determine if an interruption occurs in uploading the content such that the recipient only receives a portion of the content, and if an interruption occurs in uploading the content, executable instructions stored by the memory cause the apparatus to further perform: providing for receiving a length of the received portion of the content to thereby enable the sender to thereafter providing for uploading a remaining portion of the content to thereby recover the content such that the recipient receives all of the content as disclosed in Kohno in order for the designated recipient to acknowledge that files are missing during transfer due to known/unknown errors/interruptions. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another so that proper re-transfer of the missing files only will be transmitted again to save time, bandwidth, memory, cost, etc.

26. With respect to claims 42, 77, 99 and 121, the claims are rejected as the same reasons as claims 41, 57, 76, 98 and 120 above. In addition, Kohno discloses wherein the remaining portion of the content based upon a bit range of the remaining portion of the content ([0074], lines 1-15, [0069], lines 5-8, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission).

Art Unit: 2457

**27. Claims 32, 49, 67, 89 and 112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and in view of Squibbs et al. (US PUB 2004/0198426 A1, hereinafter Squibbs).**

28. With respect to claims 32, 49, 67, 89 and 112, Airy and Chu does not disclose wherein the upload schedule includes at least one instruction defining at least one deadline for uploading the content, and wherein the content is uploaded based upon the at least one deadline.

However, in the same field of endeavor, Squibbs discloses wherein the upload schedule includes at least one instruction defining at least one deadline for uploading the content, and wherein the content is uploaded based upon the at least one deadline ([0061], lines 10-17, [0063], lines 21-24, having regard to the remaining time in the hotspot for the device, there is sufficient time to complete the data transfer). Airy, Chu and Squibbs are analogous art because they disclose transferring data/files to a unit/server/client/system etc.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy and Chu with wherein the upload schedule includes at least one instruction defining at least one deadline for uploading the content, and wherein the content is uploaded based upon the at least one deadline as disclosed in Squibbs in order to ensure if a file cannot be transferred, it will not prevent other files from transferring because of constant re-transferring of the same file. One of ordinary skill in the art would have been motivated to incorporate the teachings with one

Art Unit: 2457

another to establish a more efficient system by accommodating non-stationary users transferring files/content while moving from one location to another that incorporate the ability to let users transfer files as needed so that the transfer of file/files will be transferred before the user moves out of the incorporated transfer area.

**29. Claims 36, 71, 93 and 115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and in view of Kobayashi et al. (WIPO # WO/2003/026216, hereinafter Kobayashi).**

30. With respect to claims 36, 71, 93 and 115, Airy and Chu does not disclose wherein the apparatus is further caused to: receive a trigger to send an upload request wherein the upload request is sent in response to the trigger independent of interaction from a user of the apparatus.

However, in the same field of endeavor, Kobayashi discloses wherein the memory stores executable instructions that in response to execution by the process cause the apparatus to further perform: providing for receiving a trigger to send an upload request wherein providing for sending an upload request comprises providing for sending an upload request in response to the trigger independent of interaction from a user of the apparatus ([0178], lines 1-6, the transfer start request of the file for using it for a presentation from a Client PCi to the communicator 3A of one's conference room). Airy, Chu and Kobayashi are analogous art because they disclose transferring files/data.



Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy and Chu with wherein the memory stores executable instructions that in response to execution by the process cause the apparatus to further perform: providing for receiving a trigger to send an upload request wherein providing for sending an upload request comprises providing for sending an upload request in response to the trigger independent of interaction from a user of the apparatus as disclosed in Kobayashi in order to incorporate multiple files being transferred at a particular time. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system so that the client/user that is sending the file knows when the best allotted time to transfer the file is.

**31. Claims 31, 66, 88 and 110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and in view of Brown as applied to claims 23, 29, 58, 64, 80, 86, 102, and 108 and in further view of Kohno.**

32. With respect to claims 31, 66, 88 and 110, the claims are rejected as the same reasons as claims 23, 29, 58, 64, 80, 86, 102, and 108 above. Airy, Chu and Brown does not disclose wherein the apparatus processes the content by breaking up the upload content into a plurality of portions.

However, in the same field of endeavor, Kohno discloses wherein the apparatus processes the content by breaking up the upload content into a

Art Unit: 2457

plurality of portions ([0068], lines 1-12, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission). Airy, Chu, Brown, and Kohno are analogous art because they disclose sending/receiving/transferring data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu and Brown with wherein the apparatus processes the content by breaking up the upload content into a plurality of portions as disclosed in Kohno in order to be able to use parts of the data even though there are loss of packets ([0074]). One of ordinary skill in the art would have been motivated to incorporate the teachings of one another to establish a more efficient system so any machine/system/etc. will only have to retransmit the packets that are loss and not the entire file/data that is being transferred.

**33. Claims 43, 44, 78, 79, 100, 101, 122, and 123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and in view of Kohno and in further view of Anderson (US Pub 2003/0084128 A1, hereinafter Anderson).**

34. With respect to claims 43, 78, 100 and 122, the claims are rejected for the same reasons as claims 23, 41, 58, 76, 80, 98, 102, and 120 above. The combination of Airy, Chu and Kohno does not disclose wherein the length of the

received portion of the content is received in accordance with a hypertext transfer protocol (HTTP) HEAD technique, and the remaining portion of the content is uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining portion of the content including header information comprising a bit range of the remaining portion of the content.

However, in the same field of endeavor, Anderson discloses wherein the length of the received portion of the content is received in accordance with a hypertext transfer protocol (HTTP) HEAD technique, and the remaining portion of the content is uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining portion of the content including header information comprising a bit range of the remaining portion of the content ([0036], lines 9-13, HEAD method is identical to GET method except that the server must not return a message-body in the response). Airy, Chu, Kohno, and Anderson are analogous art because they disclose transferring/sending data/files.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu and Kohno with wherein the length of the received portion of the content is received in accordance with a hypertext transfer protocol (HTTP) HEAD technique, and the remaining portion of the content is uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining portion

Art Unit: 2457

of the content including header information comprising a bit range of the remaining portion of the content as disclosed in Anderson in order to retrieve whatever information is identified by the request uniform resource identifier. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by being able to see if something has changed without downloading the full file therefore conserving bandwidth.

35. With respect to claims 44, 79, 101, and 123, the claims are rejected for the same reasons as claims 23, 41, 58, 76, 80, 98, 102, and 120 above. In addition, Anderson discloses wherein the apparatus is further caused to send a hypertext transfer protocol (HTTP) HEAD request to the recipient, and the remaining packets are uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining packets including header information comprising packet range of the remaining packets ([0036], lines 9-13, POST request identifies the resource that will handle the enclosed entity and PUT request identifies the entity enclosed with the request and must know what uniform resource identifier is intended and not attempt to apply the request to some other resource).

36. **Claims 43, 44, 78, 79, 100, 101, 122, and 123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and in view of**

**Kohno and in further view of Na et al. (US Pub 2006/0129631, hereinafter Na).**

37. With respect to claims 43, 78, 100 and 122, the claims are rejected for the same reasons as claims 23, 41, 58, 76, 80, 98, 102, and 120 above. The combination of Airy and Kohno does not disclose wherein providing for receiving a length of the received portion of the content comprises providing for receiving a length of the received portion of the content in accordance with a hypertext transfer protocol (HTTP) HEAD technique.

38. However, in the same field of endeavor, NA discloses wherein providing for receiving a length of the received portion of the content comprises providing for receiving a length of the received portion of the content in accordance with a hypertext transfer protocol (HTTP) HEAD technique ([0072]). Airy, Kohno, and Na are analogous art because they disclose transferring/sending data/files.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy and Kohno with wherein providing for receiving a length of the received portion of the content comprises providing for receiving a length of the received portion of the content in accordance with a hypertext transfer protocol (HTTP) HEAD technique as disclosed in Na in order to resume the upload. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by being able to get the sequence number of

the segment from which the upload should be resumed.

39. With respect to claims 44, 79, 101, and 123, the claims are rejected for the same reasons as claims 23, 41, 58, 76, 80, 98, 102, and 120 above. In addition, Na discloses wherein the apparatus is further caused to send a hypertext transfer protocol (HTTP) HEAD request to the recipient, and the remaining packets are uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining packets including header information comprising packet range of the remaining packets ([0072]).

### ***Response to Arguments***

40. Applicant's arguments filed 02/10/2010 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HO SHIU whose telephone number is (571)270-3810. The examiner can normally be reached on Mon-Thur (8:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HTS  
04/09/2010

/Ho Ting Shiu/  
Examiner, Art Unit 2457

/ARIO ETIENNE/

Supervisory Patent Examiner, Art Unit 2457